He does not, however, consider that the facts, as they at present stand, of necessity carry back Man in past time more than they bring forward the great extinct Mammals towards our own time, the evidence having reference only to relative and not to absolute time; and he is of opinion that many of the later geological changes may have been sudden or of shorter duration than generally considered. In fact, from the evidence here exhibited, and from all that he knows regarding drift phenomena generally, the author sees no reason against the conclusion that this period of Man and the extinct Mammals—supposing their contemporaneity to be proved—was brought to a sudden end by a temporary inundation of the land; on the contrary, he sees much to support such a view on purely geological considerations.

The paper concludes with a letter from Mr. John Evans, F.S.A. and F.G.S., regarding these implements from an antiquarian rather than a geological point of view, and dividing them into three classes:—

1. Flint flakes—arrow-heads or knives.
2. Pointed weapons truncated at one end, and probably lance or spear heads (fig. 2).
3. Oval or almond-shaped implements with a cutting edge all round, possibly used as sling-stones or as axes (fig. 1).

Mr. Evans points out that in form and workmanship those of the two last classes differed essentially from the implements of the so-called Celtic period, which are usually more or less ground and polished, and cut at the wide and not the narrow end; and that, had they been found under any circumstances, they must have been regarded as the work of some other race than the Celts or known aboriginal tribes. He fully concurs with Mr. Prestwich, that the beds of drift in which they were found were entirely undisturbed.

MISCELLANEOUS.

Note on the Affinities of Rhynchosaurus.

By Prof. Richard Owen, F.R.S.

To the Editors of the Annals and Magazine of Natural History.

Gentlemen,—A second and better-preserved specimen of the rare fossil reptile, *Rhynchosaurus*, from the New Red Sandstone of Shropshire, having been lately obtained from the Grinsill quarries, near Shrewsbury, and kindly transmitted for my examination by the authorities of the Museum of Natural History of that town, I have been enabled to determine the position of the two nostrils a little in front of the orbits, and to discern traces of dental structure in parts of the two bodies which, in the original specimen described by me in 1842, held the place of, and were described as, "intermaxillary bones." This discovery adds to the reasons for associating the *Rhynchosaurus* with the *Dicynodon*, in the same natural order or group

of reptiles, and confirms the opinion expressed in my first memoir on *Dicynodon*, as to the "close and important relationship between *Dicynodon* and *Rhynchosaurus**." It similarly strengthens the opinion that the formations in South Africa containing remains of *Dicynodon* belong to the same geological system (the Triassic) as the Sandstones at Grinsill, Shropshire.

In the species of Dicynodonts already described may be seen a progressive advance in the position of the pair of descending tusks of the upper jaw, from below the orbits (as in *D. strigiceps*) to below the nostrils (as in *Ptychognathus declivis*); but in *Rhynchosaurus* the bodies which are analogous, if not homologous, take the place of the premaxillary bones, and terminate the anterior contour of the skull, curving down in the present as in the first-described specimen, in front of the symphysis mandibulæ, and presenting an exaggerated condition of that pair of compound osseous and dentinal bodies which hold the place of the premaxillaries in the rare existing New Zealand amphicœlian lizard, *Rhynchocephalus*†.

There is no trace of the deflected tusk-like bodies, in *Rhynchosaurus*, being implanted in bone.

I am, Gentlemen,
Yours truly,
RICHARD OWEN.

British Museum, Aug. 24, 1859.

Note on Bulimus acutus. By Dr. J. E. GRAY, F.R.S. &c.

Bulimus acutus has been generally supposed to be confined, in the British Islands, to the West of England and Wales: it is found in abundance on the low lands on the east side of the Chesil Bank, between Weymouth and Portland, and also on the hills on the west of Lulworth Cove. It seems to appear, in the latter place at least, periodically. It is now extremely abundant, both on the grass and congregated together at the roots of the sea-beet, near the coast-guard signal station; but the coast-guardsman, who has been on the station several years, said he had not seen it before this year, and he believed that they had been blown from the opposite hills! perhaps he only meant to say, in such abundance. Now it is even more common than *Helix virgata*, with which it is found.

Swanage, August 1859.

Note on the Opercula of several Species of Megalomastoma. By W. H. BENSON, Esq.

The structure of the horny operculum of *Megalomastoma cylindraceum*, Ch., approaches, at its dorsal side, to that of *Hybocystis*, differing from the numerous spiral volutions visible on that part of the thin horny operculum of the Himalayan *M. funiculatum*, and

* Trans. Geol. Soc., 2nd ser. vol. vii. p. 67 (1845).
† *Ibid.*, vol. vii. pl. 6. fig. 519.